

Jingzhen Yuan

CURRICULUM VITAE

PERSONAL HISTORY:

Business Address & Telephone: Pancreatic Research Group, VAGLAHS-West Los Angeles, 11301 Wilshire Boulevard, Building 258, Room 340. Los Angeles, CA 90073. (310) 478-3711, ext. 41242.

Citizenship: United States of America

EDUCATION:

1997 – 2002 University of California, Los Angeles, CA
Postgraduate Researcher in Cell Biology and Signal Transduction

1991 – 1996 Mississippi State University, Mississippi State, MS
Ph.D. in Toxicology (Minor in Biochemistry and Molecular Biology)

1986 – 1991 First Hospital of Nanjing Medical University, Nanjing, China.
Medical Residency in Internal Medicine and **Special Training** in Digestive Diseases.

1983 – 1986 Nanjing Medical University, Nanjing, China
M.S in Biochemistry & Molecular Biology

1978 – 1982 Zhenjiang Medical College, Zhenjiang, China
M. B (M.D. equivalent)

PROFESSIONAL EXPERIENCE:

Aug. 2006 – **Assistant Researcher** in Pancreatic Research Group, VAGLAHS-West Los Angeles, CURE Research Center, Department of Medicine, David Geffen School of Medicine at UCLA.

2002 – 2006 **Assistant Researcher** in Unit of Signal Transduction and Gastrointestinal Cancer, Division of Digestive Diseases, Cure Research Center, David Geffen School of Medicine at UCLA

1998 – 2002 **Postgraduate Researcher** in Unit of Signal Transduction and Gastrointestinal Cancer, Division of Digestive Diseases, Cure Research Center, David Geffen School of Medicine at UCLA

1997 – 1998 **Postgraduate Researcher** in Radiation Oncology Department, Medical School of UCLA

1992 - 1996 **Research Assistant** in Department of Entomology and Plant Pathology, Mississippi State University

PROFESSIONAL ACTIVITIES:

Member, American Gastroenterological Association (AGA). 2000-Present.

Member, CURE: Digestive Disease Research Center, David Geffen School of Medicine at UCLA.

Member, Southern California Research Center for Alcoholic Liver and Pancreatic Diseases Research Program

Research Grants and Fellowships Received:

Pilot Project Funding from Southern California Research Center for Alcoholic Liver and Pancreatic Diseases Research Program (supported by Center Grant NIH/NIAAA 2P50-AA11999-11) to investigate the role of protein kinase D in alcoholic pancreatitis. 01/01/09-12/30/09. \$20,000. **Role:** Principal Investigator.

NIH/NIAAA Center Grant 2P50-AA11999-11 (PI:Tsukamoto, Section PIs: Gukovskaya /Pandol) to Southern California Research Center for Alcoholic Liver and Pancreatic Diseases Research Program. Section on “Necrosis and Alcoholic Pancreatitis”. The major goal of this project is to determine the molecular mechanism of cell necrosis in alcoholic pancreatitis and the role of PKC isotypes in ethanol-induced sensitization of the cell response using *in vitro* and *in vivo* models of pancreatitis. 01/01/09 – 12/31/13, \$132,561 /year. Role: Co-Investigator.

NIH/NIAAA Center Grant 5 P50-A11999 (PI:Tsukamoto, Section PI: Pandol) to USC-UCLA Research Center Alcoholic Liver and Pancreatic Diseases research program. Section on “Protein Kinase C and Alcoholic Pancreatitis”. The major goal of this project is to determine the role of PKC isotypes in ethanol-induced sensitization of the inflammatory response using *in vitro* and *in vivo* models of pancreatitis. 01/01/05 – 12/31/08, \$ 138,097/year. Role: Co-Investigator.

The CURE Named New Investigator Award from UCLA CURE: Digestive Disease Research Center (supported by NIH Center Grant) to study the regulation and function of protein kinase D3 (PKD3), a novel isoform of PKD family, in mitogenic neuropeptides mediated signaling pathways. \$50,000/year for two year (2004-2006). **Role:** Principal Investigator.

Individual Pilot and Feasibility Study Award from UCLA CURE Center Grant NIH NIDDK to investigate the regulation and function of protein kinase D3 a novel isoform of PKD family through GI peptide signaling pathways. 01/01/04-11/30/04. \$17,000. **Role:** Principal Investigator.

Individual Pilot and Feasibility study Award from UCLA CURE Center Grant NIH NIDDK to investigate the phosphorylation dependent mechanisms of protein kinase D activation through GI peptide signaling pathways. 01/01/03-11/30/03. \$12,000. **Role:** Principal Investigator.

Awardee of Individual National Research Serves Award Postdoctoral Fellowship from NIH/NIDDK to study Protein Kinase D Regulation by Gastrointestinal Peptides. 7/1/2000-6/31/2002. \$86,296.

Awardee of NIH/NIDDK Gastroenterology Training Grant to study activation of protein kinase D by signaling through the alpha subunit of heterotrimeric G protein Gq. 4/1/1998-6/31/2000. \$62,101.

Awardee of Mississippi State University Graduate Research Fellowship to study the toxicology and biochemistry of aliesterase inhibitors as synergists of insecticides. 1/11992-5/31/1996. \$40,000.

PRESENTATION:

The role of PKD1 in alcoholic pancreatitis. Invited presentation in Annual meeting of Southern California Research Center for Alcoholic liver and Pancreatic Diseases in University of Southern California, Los Angeles. Dec. 5, 2008.

Protein kinase D1 mediates NF- κ B activation induced by CCK and carbachol in pancreatic acinar cells. Presented in American Gastroenterological Association (AGA), Digestive Disease Week (DDW) Meeting in San Diego, May 19-23, 2008.

What does PKD have to do with alcohol, PKCs and pancreatitis? Invited presentation in Annual meeting of Research Center for Alcoholic liver and Pancreatic Diseases in University of Southern California, Los Angeles. Dec. 7, 2007.

PKC/PKD signaling in pancreatic acinar cells. Presented in Pancreatic Research Group seminar, VAGLAHS-West Los Angeles, Aug.16, 2007.

PKD and PKD2 mediate neurotensin-induced HSP27 serine-82 phosphorylation in Panc-1 cells. Presented in American Gastroenterological Association (AGA), Digestive Disease Week (DDW) Meeting in Washington DC, May 20-24, 2007.

Protein kinase D3 in intestinal epithelium cells: Activation by phorbol esters and G protein-coupled receptor agonists. Presented in AGA, DDW Meeting in Los Angeles, California, May 20-24, 2006.

Regulation of Protein Kinase D by Neuropeptide GPCR Signaling: Molecular Mechanisms and Signal Transduction Pathways. An invited lecture in Department of Pharmacology Seminar, University of California in Irvine. Irvine, California, April 24, 2006.

PKD3, a new isoform of PKD family: Activation and phosphorylation by signaling through Rac and the alpha subunits of the heterotrimeric G proteins G12 and G13. Presented in **Distinguished Abstract Plenary Sessions** in AGA, DDW Meeting in Chicago, Illinois, May 14-19, 2005.

Protein kinase D3, a new isoform of PKD family: Activation and phosphorylation by gastrointestinal peptides. Presented in AGA, DDW Meeting in New Orleans, May 15-20, 2004.

Protein kinase D3, a new isoform of PKD family: Activation and phosphorylation by GPCR signaling. Presented in Annual Meeting of CURE: Digestive Disease Research Center, in UCLA, March, 2004.

Cooperation of G_q, G_i and G_{12/13} in Protein kinase D Activation and Phosphorylation Induced by Lysophosphatidic Acid. Presented in AGA, DDW Meeting in Orlando, May 17-22, 2003.

Activation of protein kinase D by bombesin through the alpha subunit of heterotrimeric G proteins G_q and G13. Presented in AGA, DDW Meeting in San Francisco, May 18-23, 2002.

PKD is a downstream target of PKC θ . Presented in AGA, DDW Meeting in San Francisco, May 18-23, 2002.

Activation of protein kinase D by signaling through Rho and the alpha subunit of heterotrimeric G protein G13. Presented in AGA, DDW Meeting in Atlanta, May 19-23, 2001.

Activation of protein kinase D by signaling through the alpha subunit of heterotrimeric G protein Gq. Presented in **AGA Distinguished Abstract Plenary Session**, DDW Meeting in San Diego, May 22, 2000.

Signal transduction pathways of PKD activation by G-protein Coupled Receptor agonists. An invited presentation in UCLA Signal transduction Research Affinity Group Seminar. October, 1999.

Evaluation of the role of boll weevil aliesterases in noncatalytic detoxication of four organophosphorus insecticides. Presented in Entomology society of American (ESA) national meeting in Las Vegas. December, 1995.

Toxicology and biochemistry of two aliesterase inhibitors as synergists of four organophosphorus insecticides in boll weevils. Presented in ESA national meeting in Dallas. December, 1994.

PUBLICATION/BIBLIOGRAPHY:

RESEARCH PAPERS -PEER REVIEWED:

1. **Jingzhen Yuan** and Shibi Shen: Comparative analysis of activities and isoenzymes of carboxylesterases from three tissues of American cockroaches *Periplaneta Americana*. *Prevention and Control of Medical Animals* 4: 116-118, 1984.
2. **Jingzhen Yuan**, Yong Wei, Binhui Ye, and Shibi Shen: Free amino acids in hemolymph of American cockroaches *Periplaneta Americana* determined by DNS-fluorimetric method. *Acta Academiae Nanjing* 1: 23-25, 1987.
3. **Jingzhen Yuan**, Houyi Lin, Lanzhen Song, Binhui Ye, and Shibi Shen: Study on the isoenzymes of esterases in the alimentary tract of the American cockroach *Periplaneta Americana*. *China Public Health* 3: 183-184, 1987.
4. **Jingzhen Yuan**, Houyi Lin, Lanzhen Song, Binhui Ye, and Shibi Shen: A preliminary survey on the action mechanism of carboxylesterase in the dipterex-resistance of American cockroaches *Periplaneta Americana*. *Chinese Journal of Parasitology & Parasitic Disease* 1: 15-17, 1988.
5. **Jingzhen Yuan**: Serum nonspecific esterases activities in various liver diseases. *Acta Academiae Medicine Nanjing* 1: 25-27, 1989.
6. **Jingzhen Yuan**: Clinical significance of human serum nonspecific esterases in liver diseases. *Chinese Journal of Clinical Hepatology* 2: 104-104, 1989.
7. **Jingzhen Yuan** and Howard W. Chambers: Toxicology and biochemistry of two aliesterase inhibitors as synergists of four organophosphorus insecticides in boll weevils. *Pesticide Biochemistry and Physiology* 54: 210-219, 1996.
8. **Jingzhen Yuan** and Howard W. Chambers: Evaluation of the role of boll weevil aliesterases in noncatalytic detoxication of four organophosphorus insecticides. *Pesticide Biochemistry and Physiology* 61: 135-143, 1998.
9. **Jingzhen Yuan**, Lee Slice, John H. Walsh, and Enrique Rozengurt: Activation of protein kinase D (PKD) by signaling through the alpha subunit of heterotrimeric G protein Gq. *Journal of Biological Chemistry* 275,: 2157-2164, 2000.
10. **Jingzhen Yuan**, Lee Slice, and Enrique Rozengurt: Activation of protein kinase D (PKD) by signaling through Rho and the alpha subunit of heterotrimeric G protein G13. *Journal of Biological Chemistry* 276: 38619-38627, 2001.
11. **Jingzhen Yuan**, David Bae, Doreen Cantrell, Andre Nel, and Enrique Rozengurt: Protein kinase D is a downstream target of protein kinase C θ . *Biochemical and Biophysical Research Communication* 291: 444-452, 2002.
12. **Jingzhen Yuan**, Lee W. Slice, Jennifer Gu, and Enrique Rozengurt: Cooperation of G_q, G_i and G_{12/13} in Protein kinase D Activation and Phosphorylation Induced by Lysophosphatidic Acid. *Journal of Biological Chemistry* 278: 4882-4891, 2003.

13. Osvaldo Rey, **Jingzhen Yuan**, Steven H. Young, and Enrique Rozengurt: Protein kinase Cv/PKD3 nuclear localization, catalytic activation and intracellular redistribution in response to G protein-coupled receptor agonists. *Journal of Biological Chemistry* 278: 23733-23785, 2003.
14. Osvaldo Rey, **Jingzhen Yuan**, and Enrique Rozengurt: Intracellular redistribution of protein kinase D2 in response to G-protein-coupled receptor agonists. *Biochemical and Biophysical Research Communication* 302: 817-824, 2003.
15. Osvaldo Rey, Steven H. Young, **Jingzhen Yuan**, Lee Slice, and Enrique Rozengurt: Amino acid-stimulated Ca^{2+} oscillations produced by the Ca^{2+} -sensing receptor are mediated by a phospholipase C/Ins(1,4,5) P_3 -independent pathway that requires G_{12} , Rho, filamin-A and the actin cytoskeleton. *Journal of Biological Chemistry* 280: 22875-22882, 2005.
16. **Jingzhen Yuan**, Osvaldo Rey, and Enrique Rozengurt, Protein kinase D3 activation and phosphorylation by signaling through $\text{G}\alpha_q$. *Biochemical and Biophysical Research Communication* 335: 270-276, 2005.
- * 17. **Jingzhen Yuan**, Osvaldo Rey, and Enrique Rozengurt, Activation of Protein Kinase D3 by Signaling through Rac and the α Subunits of the Heterotrimeric G Proteins G_{12} and G_{13} . *Cellular Signaling*, 18: 1051-1062, 2006.
18. **Jingzhen Yuan** and Enrique Rozengurt, PKD, PKD2, and p38 MAPK Mediate Hsp27 Serine-82 Phosphorylation Induced by Neurotensin in Pancreatic Cancer PANC-1 Cells. *Journal of Cellular Biochemistry* 103: 648-662, 2008.
19. **Jingzhen Yuan**, Aurelia Lugea, Ling Zheng, Ilya Gukovsky, Mouad Edderkaoui, Enrique Rozengurt, and Stephen J. Pandol, Protein kinase D1 mediates NF- κB activation induced by cholecystokinin and cholinergic signaling in pancreatic acinar cells. *AJP-Gastrointest Liver Physiol* 295: 1190-1201, 2008.

ABSTRACTS:

1. **Jingzhen Yuan**, Lee Slice, John H. Walsh and Enrique Rozengurt: Activation of protein kinase D (PKD) by signaling through the alpha subunit of heterotrimeric G protein G_q . *Gastroenterology* 118, (Suppl. 2) AGA A183, 2000.
2. **Jingzhen Yuan**, Lee Slice, and Enrique Rozengurt: Activation of protein kinase D (PKD) by signaling through Rho and the alpha subunit of heterotrimeric G protein G_{13} . *Gastroenterology* 120, (Suppl. 1) A-499, 2001.
3. **Jingzhen Yuan**, Lee Slice, and Enrique Rozengurt: Activation of protein kinase D (PKD) by bombesin through the alpha subunit of heterotrimeric G proteins G_q and G_{13} . *Gastroenterology* 122 (Suppl.), A-136, 2002.
4. **Jingzhen Yuan**, David Bae, Doreen Cantrell, Andre Nel and Enrique Rozengurt: Protein kinase D is a downstream target of protein kinase C θ . *Gastroenterology* 122 (Suppl.), A-138, 2002.

5. **Jingzhen Yuan**, Lee W. Slice, Jennifer Gu, and Enrique Rozengurt: Cooperation of G_q , G_i and $G_{12/13}$ in Protein kinase D Activation and Phosphorylation Induced by Lysophosphatidic Acid. *Gastroenterology* 124 (Suppl.), A-77, 2003.
6. **Jingzhen Yuan**, Osvaldo Rey, and Enrique Rozengurt: Protein kinase D3 (PKD3), a new isoform of PKD family: Activation and phosphorylation by gastrointestinal (GI) peptides. *Gastroenterology* 126 (Suppl.), A-31, 2004.
7. **Jingzhen Yuan**, Osvaldo Rey, and Enrique Rozengurt: PKD3, a new isoform of PKD family: Activation and phosphorylation by signaling through Rac and the alpha subunits of the heterotrimeric G proteins G12 and G13. *Gastroenterology* 128 (4) (Suppl. 2), A-99, 2005.
8. **Jingzhen Yuan** and Enrique Rozengurt: Protein kinase D3 in intestinal epithelium cells: Activation by phorbol esters and G protein-coupled receptor agonists. *Gastroenterology* 130 (4) (Suppl. 2), A-98, 2006.
9. **Jingzhen Yuan** and Enrique Rozengurt: PKD and PKD2 mediate neurotensin-induced HSP27 serine-82 phosphorylation in Panc-1 cells. *Gastroenterology* 132 (4) (Suppl. 2), A-102, 2007.
10. **Jingzhen Yuan**, Aurelia Lugea, Ling Zhen, Ilya Gukovsky, Mouad Edderkaoui, and Stephen J. Pandol: Protein kinase D1 mediates NF- κ B activation induced by cholecystokinin and cholinergic signaling in pancreatic acinar cells. *Gastroenterology* 134 (4) (Suppl. 1), A-722, 2008.
11. E. Thrower, **J. Yuan**, M. Kelly¹, C. Jones¹, S. Pandol & S. Guha: Protein kinase D: a novel regulator of zymogen activation and amylase secretion in acute pancreatitis. *Pancreas* 37 (4): 498, 2008
12. E. Thrower, **J. Yuan**, C. Jones, A. Usmani, M. Kelly, C. Ireson, S. Pandol & S. Guha: Protein kinase D modulates secretagogue-induced zymogen activation and amylase secretion in rat pancreatic acinar cells. Abstract accepted by 2009 DDW meeting and will be published in *Gastroenterology* 2009.